**The 20th Century will dawn on the 29th of December, 1901, which will be the 1st of January, 1901, corrected time.**

# Dr. BEAN'S

# Chart for Reckoning Time.

BY

## GEORGE H. BEAN, M.D.

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# DR. BEAN'S

## CHART FOR RECKONING TIME

..BY..

GEORGE H. BEAN, M. D.

A planet that makes more than one rotation on its axis during a revolution around a member of its system describes an ellipse, as well on the axial rotation as on the revolution.

The world describes an ellipse of 361 degrees during an axial rotation, and measures 1,444 minutes of time, or 4 minutes on each degree; and makes a revolution around the sun during 364 axial rotations.

A correction of the errors in the present method of reckoning time may be attained by adding 1-360th of its present value to the length of the second, which would be adding 1-6 of a second to the minute, and 4 minutes to the day measure; and by reckoning 364 days, or 13 months of 28 days each to constitute a year, as represented in the accompanying calendar.

**1901**

**JANUARY**

| S | M | T | W | Th | F | Sat |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**FEBRUARY**

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| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**MARCH**

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| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
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| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**1901**

**APRIL**

| S | M | T | W | Th | F | Sat |
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| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**IDA**

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|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**MAY**

| S | M | T | W | Th | F | Sat |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**JUNE**

| S | M | T | W | Th | F | Sat |
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| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**JULY**

| S | M | T | W | Th | F | Sat |
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| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**AUGUST**

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| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**SEPTEMBER**

| S | M | T | W | Th | F | Sat |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**OCTOBER**

| S | M | T | W | Th | F | Sat |
|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**NOVEMBER**

| S | M | T | W | Th | F | Sat |
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| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**DECEMBER**

| S | M | T | W | Th | F | Sat |
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| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

"And God said, Let there be lights in the firmament of the heaven to divide the day from the night; and let them be for signs, and for seasons, and for days, and years." Genesis 1: 14.

The rotation of a planet on its axis, or the revolution around a member of its system, is determined by a return of the point of observation to the same position in relation to the sun.

On the annual revolution around the sun the world moves southward toward an extension to the ecliptic of the plane of the sun's equator, during the first season of the year, and passing it, continues southward during the second, whereas, the motion is northward toward an extension of the plane on the opposite side of the sun's position during the third season, and passing it, continues northward during the fourth; the result is a decrease southward, from a line perpendicular to the plane of the horizon, in the sun's angular distance, and northward in its shadow, during the first season

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of the year, and an increase during the fourth; while on the other hand an increase northward in the angular distance and southward in the shadow is evident during the second season, and a decrease during the third.

During an annual revolution four points (one that limits the sun's angular distance southward and shadow northward, and one that limits its angular distance northward and shadow southward; one as the world moves southward, and one northward, that marks the disappearance of both angular distance and shadow) divide a year into the seasons winter, spring, summer and autumn; the first and fourth consisting of 89¼ days each, and the other two of 92¾ each, as follows: winter from the 1st of January, corrected time, to the 6th of April; spring from the 6th of April to the 15th of June; summer from the 15th of June to the 23rd of September; and autumn from the 23rd of September to the 1st of January.

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"And he shall speak great words against the Most High, and shall wear out the saints of the Most High, and think to change times and laws: and they shall be given into his hand until a time and times and the dividing of time." Daniel, 7:25.

The constancy in planetary motion, and the accuracy of the time measurement that God had provided for the convenience of man were displeasing to Satan, whose power was dependent, as it is now, upon his ability to disseminate idolatry, deception and ignorance, and he caused his people to adopt a day measure consisting of 1,440 instead of 1,444 minutes, the true number, under the pretense that a circle, or 360 degrees, and not an ellipse of 361, the true number, was described by the world on the axial rotation: it failed by 4 minutes of time, or by one degree, and by 1,456 (364 × 4) minutes during a year, or 12 minutes more than a natural day (1,444 minutes), and 16 minutes more than the adopted day measure (1,440 minutes).

A pretended correction (to a defective day measure) was made by increasing the number of days in a year to 365, which failed to measure a natural year by 20 minutes (365 × 4 = 1,460 − 1440 = 20), and caused what is known as the precession of the equinoxes.

The day measure being 4 minutes short, causes the condition described on page 258 of the American Nautical Almanac for 1901, as follows: "About March 21st of each year the sidereal clock agrees with the mean time or ordinary clock, and the former gains on the latter about 3 minutes 56 seconds per day, so that at the end of a year it will have gained an entire day and will again agree with the mean time clock." On page 257 is the following: "To avoid the irregularity which would arise from using the true solar day, astronomers have recourse to the mean solar day, whose length is equal to the average of all the true solar days in a year, * * * * * the mean solar day is made to depend upon the motions of an imaginary mean sun. The imaginary mean sun is supposed to keep as near the true sun as is consistent with perfect uniformity of motion, but it is sometimes before and sometimes behind the latter, the greatest difference amounting to about sixteen minutes of time."

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Julius Cæsar, B. C. 45, made an endeavor to correct the errors in time measurement by ordering the addition of one day to every fourth year, but Augustus modified the time of the rule by causing its application to date from B. C. 36.

The addition of one day to every fourth year caused an advance of dates from natural time to the extent of one day in four, or 25 in 100 years; and 475 3-7 days to the close of the present year.

Dionysius Exiguus, a Scythian by birth, who studied at Rome and became a monk, proposed A. D. 519 the Dionysian era: It counts the years from the conception of Christ, designating the January following the December in which Christ was born as the January of the 2nd year of Christ. It was adopted by the popes.

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Pope Gregory XIII, A. D. 1582, reenacted the rule of Cæsar, excepting for the years, divisible by 100, but not by 400, which he removed from its operation, and brought the year forward ten days by reckoning the 5th of October the 15th.

Previous to 1752 the years began on the 25th of March, but England brought that year forward eleven days by reckoning the 3rd of September the 14th; and began the next year on the 1st of January, eliminating the last 83 days from the first year of the Dionysian Era and the balance of the year by reckoning the years from the birth of Christ. The Christian Era was thus inaugurated.

By adding one day to the year measure the days of the week were caused to make a circuit in seven years. The attempt every fourth year to add a day to a year measure that is only 12 minutes short results in the last day of the year being reckoned as the first day of the ensuing year; it reduces the time of four circuits of the days of the week to 21 years. It caused the seasons of the year to make a circuit of the months in 1,456 years (364x4), when one year was recorded in advance of natural time.

| | |
|---|---|
| Pope Gregory XIII brought the year 1582 forward | 10 days |
| and caused to be omitted from records, | 3 days |
| resulting in an advance of records of | 7 days |
| England brought the year 1752 forward | 11 days |
| which added to the 7 gives a total advance of | 18 days |
| The deficiency of 12 minutes in the year measured for 1,900 years amounts to | 16 days |
| The effect of the several causes is an advance of | 2 days |

Counting backward two days from the first day of a year, and omitting the superfluous 365th day, indicates the position in the calendar that is now occupied by the 29th of December, as the position designed for the first day of the year.

| | |
|---|---|
| The year 1582 was shortened, | 10 days |
| The years 1700, 1800 and 1900 were shortened, | 3 days |
| The year 1752 was shortened, | 11 days |
| The year 1752 was also shortened, | 83 days |
| The year that corrects the calendar will be shortened, | 3 days |
| The sum of the reductions is, | 110 days |

Deduct 110 days from 475 3-7 and the remainder is 365 3-7 days, the advance of records from natural time that will exist on the 29th of December next, which, for that reason and for the one that shortens the year three days, will be the 1st of January, A. D. 1901.

A day or year begins with the sun at meridian at the Pillar.

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"In that day shall there be an altar to the Lord in the midst of the land of Egypt, and a pillar at the border thereof to the Lord.

"And it shall be for a sign and for a witness unto the Lord of hosts in the land of Egypt." Isaiah, 19: 19, 20.

The Great Pyramid "in the midst of the land of Egypt and a pillar at the border thereof," which is the Nileometer on the island of Elephantine, at the first cataract of the Nile, are of structures extant the most ancient.

Primeval man employed as the unit of mensuration the width of a digit (finger); seven digits constituting one span, and four spans one ell. The Pillar, standing on primary rock in place and of like material, is open at the top, and has a stairway 13 ells in length that covers the descent to a landing within, situated 3 48-49 ells above the floor. The number of digits in a span, the number of spans in an ell,

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the number of ells in the length of the stairway, and the number in the distance from it to the floor are designated by the numerals
7, 4, 13 and
3 48-49. The product of 7x4x13 is
364 the number of days in a year, and of 7x4 is
28 the number of days in a month. The third numeral is
13 the number of months in a year; the second
4 the number of weeks in a month, and the first
7 the number of days in a week. The sum of 7, 4, and 13 is
24 the number of hours in a day. The product of 4x13 is
52 the number of weeks in a year. The denominator of 48-49 is
49 the number of lunar weeks in a year, and the numerator
48 the number of lunar weeks in an incomplete or lunar year.
111 3-7, the product of 7x4x3 48-49, when added to 7x4x13 is
475 3-7, the height, in digits, by the stairway, of the Pillar; also the advance in records, or the number of days added to natural time in 1901 defective years and 8 4-7 months to the 29th of next December, by the rule of Cæsar, and the number of natural days between the 8th of September last and that date.

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In Galveston, Tex., during the storm and tidal wave of September 8, 1900, a cross, with a representation of Jesus crucified, was torn from its fastenings and braced by falling timber, at an angle of 45 degrees from a perpendicular, "standing where it ought not." An angle of 45 degrees is $\frac{1}{8}$ of a circle, and 325, the date of the Council of Nice, is $\frac{1}{8}$ of a "time."

| | | |
|---|---|---|
| There are | 2,600 | revolutions of the world around the sun in a "time," |
| 13 times | 200 | the number in a month of sabbaths of years, or |
| 4 times | 50 | that is the space of seven sabbaths of years, |
| 7 times | 7 | years, together with one jubilee year. |

(See Leviticus, 25: 4, 8, 11.)

The number 2,600 measures the years of a "time," and the buildings, by actual count, that were destroyed by a wind storm and tidal wave at Galveston, Tex., on the 8th of September, 1900, and that of 1,300 of half a "time," as well as the buildings destroyed by a fire that was caused by electricity in Jacksonville, Fla., on the 4th of May, 1901, the day that was equidistant, or 237 5-7 axial rotations of the world, from the 8th of September, 1900, and the 29th of December, 1901, while the same relation to half that number of rotations exists among the dates of the 1st of September, 1901, the date of the great storm at Cleveland, Ohio, the 4th of May, 1901, and the 29th of December, 1901. Half a "time" measures the years from Adam to the deluge; a time from the deluge to Isaiah, and from Isaiah to the close of the current year, therefore a measure of the years from Adam to the 1st of January, 1901 (corrected time), consists of a "time, times and a half." On that day Western Europe and Western Asia will be submerged.

"How long shall it be to the end of these wonders?

"It shall be for a time times and a half.

"And he said, Go thy way, Daniel: for the words are closed up and sealed till the time of the end." Daniel, 12: 6, 7, 9.

"Woe to the land shadowing with wings, which is beyond the rivers of Ethiopia." Isaiah, 18: 1.

"But when you shall see the abomination of desolation spoken of by Daniel, the prophet, standing where it ought not (let him that readeth understand), then let them that be in Judea flee to the mountains."

"For in those days shall be affliction, such as was not from the beginning of the creation, which God created until this time, neither shall be." St. Mark, 13: 14, 19.

"And now I have told you before it come to pass, that, when it is come to pass ye might believe." St. John, 14: 29.

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## OLMSTED, HICKS, AND SIR JOHN HERSCHEL.

"Since the sun passes from west to east, through 360 degrees in 365¼ days, it moves eastward nearly one degree a day. While, therefore, the earth is turning round on its axis, the sun is moving in the same direction, so that when we have come round under the same celestial meridian from which we started, we do not find the sun there, *but he has moved eastward a degree*, and the earth must perform so much more than one complete revolution, in order to come under the sun again. Now since a place on the earth gains 360 degrees in 24 hours how long will it take to gain 1 degree? $360 : 24 :: 1 : \frac{24}{360} = 4$ minutes nearly.

Hence the solar day is about 4 *minutes longer than the sidereal*; and if we were to reckon the sidereal day 24 hours, we should reckon the solar day 24 hours 4 minutes. To suit the purposes of society at large, however, it is found most convenient to reckon the solar day 24 hours, and throw the fraction into the sidereal day: Then 24 hours 4 minutes : 24 : : 24 : 23 *hours 56 minutes, the length* of a sidereal day."

*—Denison Olmsted, L. L. D., Late Professor of Natural Philosophy and Astronomy in Yale College.*

"For many years we have been directing the minds of our readers to the fact that Jupiter, Saturn, Uranus and all the planets except Neptune, would congregate on the same side of the Sun about the time of the next Jupiter equinox. We say frankly that we do not know what the result will be. Our monthly diagrams of the solar system, which we have been giving to the public for over ten years, in Word and Works and our almanac, have shown how Saturn and Jupiter have steadily gained on Uranus. Of the next Jupiter disturbance, from three to four years in duration, the center will fall in the year 1901. Years ago we were first to intimate that phenomena of unusual character and force might result from this compact of worlds on one side of the Sun."

*—The Rev. Irl R. Hicks Almanac, 1898.*

"A very slight eclipse of the Sun will occur on April 8th (1902). On April 22nd there will be a total eclipse of the Moon. New Moon on the 8th happens with the Moon further from the equator, it having crossed that line on the *6th*. The full Moon is also further from the equator being over two days past its equatorial passage at full on the 22nd. The Moon makes two conjunctions with Jupiter and Saturn in April. At the beginning of April we have *six morning stars*. The engraving for the month shows that Mercury, Venus, Mars, Jupiter, Saturn and Uranus are all on the *morning side of the Sun*."

*—Hicks Almanac, 1902.*

"The reformation of Gregory was incomplete. Instead of ten days he should have omitted twelve. He assumed for his fixed point of departure, not the Julian epoch, but one later by 324 years, viz. January 1, A. D. 325, the year of the Council of Nice.

The history of the calendar, with reference to chronology, or to the calculation of ancient observations, may be compared to that of a clock, going regularly when left to itself, but sometimes forgotten to be wound up: and when wound, sometimes set forward, sometimes backward, either to serve particular purposes and private interests, or to rectify blunders in setting. Such, at least, appears to have been the case with the Roman calendar, in which our own originates, from the time of Numa to that of Julius Cæsar, when the lunar year of 13 months was augmented at pleasure to correspond to the solar.

Our own division into twelve unequal months is entirely arbitrary, and often productive of confusion.

We may judge of the state into which the reckoning of time had fallen 45 B. C., by the fact, that to introduce the new system it was necessary to enact that the previous year should consist of 445 days.

Equinoxial time dates from (1828) the mean vernal equinox of Delambre's solar tables. In 1834 it would appear that a deviation took place, which has ever since perpetuated. It consisted in rejecting the mean longitude of Delambre's tables, and adopting Bressel's correction.

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The effect of this alteration was to insert *3 minutes* 37.68 of *purely imaginary time*. In 1835, and in all subsequent years, a further departure took place by substituting Bessel's tropical year for Delambre's. Thus the whole subject has fallen into confusion."—*Herschel.*

Gregory caused dates to retrograde in the calendar 10 and 3 days, England added to the number 11 and 83, resulting in a total of 107. The last day of the year being 4 minutes short reduced that number in 1900 years to 101. England in 1828 by adopting Delambre's tables and reckoning the year to begin at Greenwich, 28 degrees north of the "Pillar," added 28 days to the above total, which, again, was reduced 18 days from 1828 to 1900 by the rule of Cæsar; the two therefore, increased it 10, or to 111 days, which is the number that the calendar should be moved forward, to attain its proper position in relation to the solstices, equinoxes, and seasons: this correction places the 8th of September 1900 in the position of the 27th of December, and the 29th of December in that of the 19th of April, 1902, which, therefore, will be the position of the 1st of January 1901, *corrected time*, and the dawn of the 20th century.

**Attention is called to a partial list of the events (see those on 2nd page preceding) recorded since September 8, 1900, at noon, as well as to the relations existing among their dates.**

On the 11th day of October 1899 the Boer farmer took up arms in defence of the republic; 32,000 facing 250,000 British soldiers.

On the 21st of August 1901 the British government received a dispatch from its commanding general in the land of the Boers, partly as follows: "There are no more than 13,500 Boers now under arms. The wearing down process is necessarily slow."

On the morning of January 22, 1901 the Queen of Great Britain died. On the morning of June 24, 1901 the representative of the United States of America, and, temporarily of Great Britain, to the Boer Republics died. On the afternoon of September 6, 1901 the President of the United States of America was mortally wounded. The number of days (less one) from the 1st to the 2nd date is 151 (476—325=151), and from the second to the third one-half that number or 75½. On the 11th of October 1901 Commandant Lotter of the Boer army, a prisoner, "was executed" by the British army. On the 18th of January 1902 Commandant Scheepers of the Boer army, a prisoner, was executed by the British army.

On the 5th of March 1902 the President of the United States of America (successor to the deceased president) informed two Boer representatives, who called as *private citizens*, that this government can not interfere in the struggle.

The day of the first execution with that of the second and the number of days (99) between them produce the date first mentioned—October 11, 18-99. The number of days from September 6, 1901 to March 5, 1902 is 178⅔, the time of the two seasons autumn and winter, while the forenoon of January 18th, being one-half that number or 89⅓ days from the 19th of April 1902, began the last season autumn of the 19th century. The 5th of March was ½ of 89⅓ days from the 19th of April.

On the 28th of January 1902, 13 sticks of dynamite exploded in New York City destroying 13 buildings, and on February 9, a fire in Patterson, N. J., destroyed 258 buildings; 258 − 1 + 68 = 325.

The anniversary of the birth of Lord Jesus was January 14th, of the crucifixion February 22nd, of the resurrection February 24th, and of the ascension will be April 6th.

One-fourth of 475⅔, considered as a whole number, is 119, and one-seventh 68. The number of days from September 8, 1900, to January 4, is 119, from the latter date to May 4th, 119, thence to September 1, 119, from that date to December 29, 119: the number from September 8, 1900, to November 15, when a portrait of President Lincoln fell to the floor of the East Room, 68, thence to January 22, 1901, 68, from January 14, toMarch 22, the date reckoned to begin a natural year at Greenwich, 68, from June 24, to September 1st, 68, from September 6, to November 15, less one, 68, from February 9, to *April 19, 1902*, 68, from January 28, to April 6, 1902, 68, and from April 6, to the 19th, 13.

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On December 29, 1901, a waterspout burst over the town of Saffee, Morocco, and two hundred persons were drowned.

On March 7, 1902, 68 days later, General Methuen and 300 of his men were captured while the balance of his command was chased four miles by the Boers.

Each one of the three kinds of time measure now in use fails in a year by either 20, 16, or 12 minutes, and the superfluous day must be eliminated in calculations based on natural time.

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**The mechanism of the time-piece in the sky is adjusted to the three numerals 7, 4 and 13.**

"The law of Gravitation—all masses tend toward each other, with a force varying directly as the quantity of matter, and inversely as the square of the distance."—*Newton*.

The sun's matter is 700 times greater than that of the other members, combined, of the solar system. The sun has one motion within the solar system—an axial rotation, the world two, an axial rotation and a revolution around the sun, and the moon three, an axial rotation, a revolution around the world, and, associated with the world, a revolution around the sun.

The sun measures hours, days, and years, and the moon determines the following periods of time, namely; one day while describing $12\frac{31}{288}$ degrees of arc in the direction of the world's axial rotation, 7 days during one of the phases, 28 by a period of them and one day and $\frac{5}{7}$ between periods, $7\frac{3}{7}$ days in a lunar week, $29\frac{2}{7}$ in a lunar month, $89\frac{1}{7}$ days, 12 lunar weeks, or 3 lunar months in a season autumn or winter, $92\frac{6}{7}$ days, $12\frac{1}{4}$ lunar weeks, or $3\frac{1}{4}$ lunar months in a season spring or summer, 208 days, 28 lunar weeks or 7 lunar months in a little lunar year, $356\frac{1}{4}$ days, 48 lunar weeks, or 12 lunar months in a big lunar year, 364 days, 49 lunar weeks, or $12\frac{1}{4}$ lunar months in a solar year, and $16\frac{1}{4}$ solar years during a lunar cycle.

The winter solstice is observed on the 19th of April (January 1, corrected time), when the sun casts no shadow within the "Pillar" at meridian. The apparent motion of the sun spots determines the position of each solstice and equinox.

"The apparent movements of the (sun) spots vary from month to month during the year according to the season. *In March* their paths are very elongated ellipses with the converity towards the N., the longer axis of the ellipse being almost parallel to the ecliptic. After that epoch the curvature of the ellipse diminishes gradually, at the same time that the major axis becomes inclined to the ecliptic so that *by June* the flattening of the ellipse has proceeded so far that the path has become a straight line. *Between June and September* the elliptical form reappears but in a *reversed* position; then following these reversed phases, the ellipticity decreases, and for the second time there is an epoch of straight lines. This happens in *December*, but the straight lines are inclined in a converse direction to that which was the case in *June*. These seemingly different forms of path pursued by the spots are merely effects of *perspective*, for in reality, the spots in crossing the Sun's disc describe lines which are virtually parallel to the solar equator. These projections really *depend of course* on the position of the observer on the Earth, and vary as his position varies during the Earth's annual circuit round the Sun."—*Chambers. Author of the "Story of the Stars."*

The north and south poles of the earth are directed to points $11\frac{1}{4}$ degrees distant from the polar points of the world, and, during an axial rotation of the world, describe an ellipse, with a radius of that number of degrees, around each of the two latter points. This causes all parts of the earth to alternately advance toward or beyond, and recede from the equator during an axial rotation of the world, at the Pillar to the extent of the diameter of the ellipse, that is, $23\frac{1}{2}$ degrees, varying from the point of departure one degree daily on account of the annual motion of the world around the sun, and completing a cycle of the variations during the year. Thus are produced changes in the length of the days, the seasons, and the ocean currents and tides.

The italics in the foregoing extracts were not in the original works.

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In its measurements the Great Pyramid of Egypt records seven periods of years that, taken together, cover the time required for the solar system to revolve around the north star, as follows: 7 years make one sabbatical year, 7 sabbatical years, and one jubilee year, one sabbatical week, 4 sabbatical weeks, one sabbatical month, 13 sabbatical months one "time" (2600 years), 36 "times" one season, 4 seasons one Creation day, and 7 Creation days one revolution around the north star, completing a cycle.

7
50
200
2600
93600
374400
2620800

"But take ye heed: behold, I have foretold you all things. But in those days, after that tribulation the sun shall be darkened, and the moon shall not give her light. And the stars of heaven shall fall, and the powers that are in heaven shall be shaken. And what I say unto you I say unto all, Watch."—*St. Mark XIII: 23, 24, 25, 37.*

When the sun is over the "Piller" and casts no shadow on the 1st day of the 20th century a star of great brilliancy that will be visible from the western hemisphere will approach the earth.

The mean density of the earth is five times greater than that of water. Ice forms at the poles of the *earth* very much predominating at the southern pole, which causes the earth's centre of gravity to move proportionately in that direction; this process continues for centuries until a sufficient quantity of matter, composing the members of the solar system, congregates on one side of the world to cause by the force of gravitation a readjustment of the earth's centre of gravity to that of the world, resulting also in the submergence of a portion of the earth's surface. The situation of the planets, the Bible and buried cities, the fossils and geological formations tell when and where it last took place as well as when and where it may be expected again.

A line drawn from El Paso, Texas, to the south-west corner of Connecticut, thence, south of New England, across the Atlantic ocean and the island of Great Britain, near the southern boundary of the county of Ross, to the continent of Europe, and, taking in Western Europe with Western Asia, returning by the Mediterranean sea, the Atlantic ocean, and Gulf of Mexico to the place of beginning indicates the portion that will next be swallowed up by the ocean.

**On April 6, Venus, Mercury, Mars, Jupiter, Saturn, Uranus, Sun and Moon will all be on one side of the World, and a submergence of Western Europe, Western Asia, and the south-eastern section of the United States of America inclucing Texas will begin, and will be completed in thirteen days when the Moon arrives again on the equator, or on April 19, 1902 (January 1, 1901 corrected time).**

| 1901 | JANUARY | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**FROM APRIL 19th, 1902, NOON TO MAY 17th, NOON.**

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| 1901 | FEBRUARY | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**FROM MAY 17th, NOON**
**TO JUNE 14th, NOON.**

| 1901 | MARCH | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**FROM JUNE 14th, NOON**
**TO JULY 12th, NOON.**

| 1901 | APRIL | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**FROM JULY 12th, NOON**
**TO AUGUST 9th, NOON.**

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| 1901 | IDA | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

FROM AUGUST 9th, NOON
TO SEPTEMBER 6th, NOON.

| 1901 | MAY | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

FROM SEPTEMBER 6th, NOON
TO OCTOBER 4th, NOON.

| 1901 | JUNE | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

FROM OCTOBER 4th, NOON
TO NOVEMBER 1st, NOON.

(The first line after October on last page should read:
From January 24th, noon.)

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| 1901 | JULY | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**FROM NOVEMBER 1st, NOON**
**TO NOVEMBER 29th, NOON.**

| 1901 | AUGUST | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**FROM NOVEMBER 29th, NOON**
**TO DECEMBER 27th, NOON.**

| 1901 | SEPTEMBER | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**FROM DECEMBER 27th, NOON**
**TO JANUARY 24th, NOON.**

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| 1901 | OCTOBER | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**FROM JANUARY 23rd, NOON**
**TO FEBRUARY 21st, NOON.**

| 1901 | NOVEMBER | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**FROM FEBRUARY 21st, NOON**
**TO MARCH 21st, NOON.**

| 1901 | DECEMBER | | | | | 1901 |
|---|---|---|---|---|---|---|
| SUN. | MON. | TUE. | WED. | THU. | FRI. | SAT. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |

**FROM MARCH 21st, NOON**
**(Omitting the 18th of April)**
**TO APRIL 19th, NOON.**

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